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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,859	06/06/2006	Yasuo Kobayashi	033082M280	7185

441 7590 02/11/2011

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EXAMINER	
MILLER, MICHAEL G	

ART UNIT	PAPER NUMBER
1712	

MAIL DATE	DELIVERY MODE
02/11/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Amendment

1. Examiner notes and enters the amendment filed 01 FEB 2011.

Response to Arguments

2. Applicant's arguments filed 01 FEB 2011 have been fully considered but they are not persuasive.

3. Applicant argues that the combined art has the appearance of being assembled with the aid of Applicant's specification, or more directly, with the use of impermissible hindsight. Examiner respectfully disagrees.

4. Applicant's assertion is that the assembled art would not lead a person having ordinary skill in the art to come to a set of process conditions which would produce the desired film. Examiner disagrees. '518 is expressly aimed at performing deposition of a CF film onto a substrate but is silent as to the operating parameters of the plasma and to certain end parameters of the deposited film. '621/'457 teach a known set of plasma parameters which generates a high-density, low-temperature plasma deemed advantageous by '457 in order to prevent substrate damage to the substrates of '518 and, further, with within the defined boundaries of plasma parameters used by '518. In short, '518 wants a plasma generator, and '621/'457 provide one workable with the defined properties of '518. '518 is aimed at the field of semiconductors; therefore, the teachings of '704 that say CF films are desirable for semiconductors are relevant to '518 and they show that it is known to produce films at half the leakage of silicon dioxide with a dielectric constant of 2.3 for use in semiconductors; Schuegraf provides evidence of

the leakage values for silicon dioxide and, by logical extension in view of '704, the leakage values of CF films. Therefore, it would be obvious to use the combined system of '518/'621/'457 to target films with the properties of '704/Schuegraf, as both '518 and '704 are drawn to depositing CF films on semiconductors and '704 teaches the advantageous nature of certain properties. '975 is added for structural components and is not relevant to the assertion of process conditions beyond the point of operability at said conditions, which is not under dispute at this time. In summary, the pieces were available in the art, with indications in each reference individually as to why the given process conditions and product limitations would be desirable for producing a CF film. A person having ordinary skill in the art at the time the invention was made would be aware of the byplay of parameters as discussed by Applicant and would have the skills to adjust the parameters in light of the art to obtain a desired product as detailed in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL G. MILLER whose telephone number is (571)270-1861. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on (571) 272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael G. Miller/
Examiner, Art Unit 1712

/Michael Cleveland/

Supervisory Patent Examiner, Art Unit 1712